

BOOK REVIEWS

SOILS: A NEW GLOBAL VIEW by T. Paton, G. S. Humphreys and P. B. Mitchel, UCL Press, London, 1995. No. of pages: ix + 213. Price £14.95 (pb). ISBN 1-85728-465-8

This is essentially a pedological textbook written from a geological and geomorphological viewpoint. It is divided into two main sections – the processes of soil formation and the distribution of soil material. The first two chapters offer a brief review of weathering, leaching and new mineral formation and inheritance. Next comes an examination of bioturbation, which provides a more detailed view than is often found in pedological texts and reflects the specialism of two of the authors. Rainwash and aeolian processes are then discussed, followed by a chapter concentrating on soil creep.

The second section considers the distribution of soil material with particular emphases on lithological materials and position within the landscape. Two chapters use a series of case studies from Australia and Africa to examine soils of continental plate centres, demonstrating the role of the processes discussed in the first section of the book. The penultimate chapter considers soils of other continental plate centres, dealing with the Americas, Asia and Europe in an extremely summary fashion, and the final chapter examines soil materials of continental plate margins, concentrating on

case studies from New Zealand and New Guinea. Appendices 1 (silicate structures), 2 (soil fabric and consistence) and 3 (field texture grading) complete the book.

Although this book covers some useful ground, albeit somewhat unevenly, its main problem is the authors' view that 'zonalism' is an all-pervading ill within pedology, which forms the basis of its *raison d'être* – to advocate a move away from the confines of vertically operating soil processes and related taxonomic systems towards a broader Earth science approach to the subject. In making its argument it adopts a largely historical approach to the literature, with relatively few references to work published within the last ten or fifteen years. However, in view of the close links which have developed between pedology and geomorphology during this time, and of the major developments over a similar period in palaeopedology, a field which has a strong, inherent Earth science component, I find the argument difficult to accept, and am left wondering why the authors have chosen not to consider these important issues.

S. ELLIS
Department of Geography
University of Hull
Hull, HU6 7RX
UK